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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,256	07/11/2003	Mary B. Clark	1033-SS00387	3946

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EXAMINER
JEAN GILLES, JUDE

ART UNIT	PAPER NUMBER
2143	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/618,256	CLARK ET AL.
Office Action Summary	Examiner	Art Unit	
	Jude J. Jean-Gilles	2143	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _02 April 2007_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-30_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-30_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _11 July 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _04/09/2004_.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This Action is in regards to the Reply received on 04/02/2007.

Response to Amendment

1.   This action is responsive to the application filed on 08/31/2005. There are no

amended claims. There are no newly added claims. Claims 1-30 are pending. Claims

1-30represent a method and apparatus for "MULTI-USER DATABASE SYSTEM AND

METHOD FOR RESOURCE USAGE TRACKING"

Response to Arguments

2.   Applicant's arguments with respect to claims 1, 10 and 19 have been carefully

considered, but are not deemed fully persuasive. Applicant's arguments are deemed

moot in view of the following new ground of rejection as explained here below

         The dependent claims stand rejected as articulated in the First Office Action and

all objections not addressed in Applicant's response are herein reiterated.

Information Disclosure Statement

3.   The references listed on the Information Disclosure Statement submitted on

04/09/2004 have been considered by the examiner (see attached PTO-1449A).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Jones et al (hereinafter Jones) U.S. Patent No. 6,804,330 in view of Tully et al (Tully)

U.S. Pub. No. 2006/0252490 A1.

Regarding claim 1: Jones discloses the invention substantially as claimed. Jones

teaches a multi-user database system comprising:

at least one processor (fig. 33, item 604);

at least one network interface coupled to the at least one processor, the at least one

        network interface configured to receive transactions from a plurality of users

(column 35, lines 15-34; column 39, lines 55-63; note that the inputs are the

transactions received fro the users), transactions including session maintenance

transactions and data requests(column 35, lines 34-55);

an accounting table to store data associated with the data requests (fig. 14, item 218;

column 20, lines 50-52); however Jones does not disclose the details of "an event table

to store an event log of the session maintenance transactions and a session table

derived from the event table and the accounting table, the session table to store

resource usage data associated with at least one user session".

        In the same field of endeavor, Givoly discloses an" ... *According to another*

embodiment, all or some of the information in the game session

database 600 may instead be stored at the controller 400. The

table includes entries identifying game sessions (e.g., a game

session associated with a set of event results) that have been

played, or are being played, by a player The table also defines

fields 602, 604, 606, 608, 610, 612, 614, 616, 618 for each of

the entries. The fields specify: a game session identifier 602;

a game identifier 604; a total time period 606; an average time

per event 608; a time remaining 610; a total wager amount 612; a

wager balance amount 614; a cumulative payout amount 616; and a

session status 618. The information in the game session

database 600 may be created and updated, for example, based on

information received from a player device and/or the controller

400 ..." [see Tully; par. 0126].

Accordingly, it would have been obvious to one of ordinary skill in the networking

art at the time the invention was made to have incorporated Tully's teachings of using

both an event table and a session table to store the resource data associated with a

user session with the teachings of Jones, for the purpose of improving the ability of a

database to store resource usage data in connection with user session and event to

increase system's reliability and efficiency. By this rationale, **claim 1** is rejected.

Regarding claim 2: the combination Jones- Tully discloses the multi-user database

system of claim 1, wherein the resource usage data includes CPU usage (see Jones;

column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 3: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the resource usage data includes input/output usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 4: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the at least one processor comprises more than one processor in a parallel processing environment (see Jones; column 30, lines 20-39).

Regarding claim 5: the combination Jones- Tully discloses the multi-user database system of claim 4, wherein the parallel processing environment is associated with an enterprise data warehouse (see Jones; column 30, lines 20-39).

Regarding claim 6: the combination Jones- Tully discloses the multi-user database system of claim 1, further comprising: a request table derived from the event table and the accounting table, the request table to store resource usage data associated with the data requests [see Tully; par. 0126; 0132].

Regarding claim 7: the combination Jones- Tully discloses the multi-user database system of claim 6, wherein the request table is accessible to identify data requests that utilize a selected level of computing resources [see Tully; par. 0126; 0132].

Regarding claim 8: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the session table is accessible to identify sessions that utilize a selected level of computing resources [see Tully; par. 0126; 0132].

Regarding claim 9: the combination Jones- Tully discloses the multi-user database system of claim, wherein the session table is accessible to identify usage trends for resource utilization forecasting [see Tully; par. 0126; 0132].

Regarding claim 10: the combination Jones- Tully discloses a multi-user database system comprising:

a processor (see.Jones; fig. 33, item 604);

a network interface coupled to the processor, the network interface configured to receive transactions from a plurality of users (see Jones; column 35, lines 15-34; column 39, lines 55-63), the transactions including session maintenance transactions and data requests (see Jones; column 35, lines 34-55);

an event table to store an event log of the session maintenance transactions [see Tully; par. 0126; 0132];

an accounting table to store data associated with the data requests(see Jones; fig. 14, item 218; column 20, lines 50-52); and

a request table derived from the event table and the accounting table, the request table to store resource usage data associated with the transactions [see Tully; par. 0126; 0132].

Regarding claim 11: the combination Jones- Tully discloses the multi-user database system of claim 10, wherein the resource usage data includes CPU usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 12: the combination Jones- Tully discloses the multi-user database system of claim 10, wherein the resource usage data includes input/output usage (see

Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 13: the combination Jones- Tully discloses the multi-user database

system of claim 10, wherein the request table is accessible to identify data requests that

utilize a selected level of computing resources(see Jones; column 30, lines 20-39).

Regarding claim 14: the combination Jones- Tully discloses the multi-user database

system of claim 10, further comprising more than one processor in a parallel processing

environment(see Jones; column 30, lines 20-39).

Regarding claim 15: the combination Jones- Tully discloses the multi-user database

system of claim 14, wherein the parallel processing environment is associated with an

enterprise data warehouse(see Jones; column 30, lines 20-39).

Regarding claim 16: the combination Jones- Tully discloses the multi-user database

system of claim 10, further comprising: a session table derived from the event table and

the accounting table, the session table to store resource usage data associated with at

least one user session [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 17: the combination Jones- Tully discloses the multi-user database

system of claim 16, wherein the session table is accessible to identify high resource

utilization sessions [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 18: the combination Jones- Tully discloses the multi-user database

system of claim 16, wherein the session table is accessible to identify usage trends for

resource utilization forecasting [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 19: the combination Jones- Tully discloses a method of tracking

database system usage, the method comprising:

determining a set of new sessions from an event log data table to form a temporary

session data table [see Tully; par. 0126; 0132; fig. 7];

matching entries in the temporary sessions data table with a set of request transactions

to form a matched data table[see Tully; par. 0126; 0132; fig. 7];

preparing a sessions level summary from the matched data table [see Givoly; column 3,

lines 11-25; column 11, lines 58-66];

updating a session table, the session table to store resource usage data associated with

the set of new sessions; and querying the sessions table to track database system

usage [see Jones; column 35, lines 34-55; see Tully; par. 0126; 0132; fig. 7]..

Regarding claim 20: the combination Jones- Tully discloses the method of claim 19,

wherein the resource usage data includes CPU usage (see Jones; column 39, lines 52-

67; column 40; lines 1-41).

Regarding claim 21: the combination Jones- Tully discloses the method of claim

19, wherein the resource usage data includes input/output usage (see Jones; column

39, lines 52-67; column 40; lines 1-41).

Regarding claim 22: the combination Jones- Tully discloses the method of claim 19,

further comprising: determining a set of open sessions; and associating the set of open

sessions with logoff events stored in the event log data table (see Jones; column 20,

lines 18-43).

Regarding claim 23: the combination Jones- Tully discloses the method of claim 19,

further comprising: determining a set of open sessions; associating running sessions

with open sessions in the set of open sessions; and closing open sessions not

associated with running sessions (see Jones; column 30, lines 20-39).

Regarding claim 24: the combination Jones- Tully discloses the method of claim 19,

further comprising: preparing a request level summary from the matched data table;

updating a request table, the request table to store resource usage data associated with

the set of request transactions; and querying the request table to track resource usage

[see Tully; par. 0126; 0132; fig. 7].

Regarding claim 25: the combination Jones- Tully discloses the method of claim 24,

wherein querying the request table includes providing data associated with resource

inefficient transaction requests [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 26: the combination Jones- Tully discloses the method of claim 25,

further comprising: modifying the resource inefficient transaction requests whereby

database performance is enhanced (see Jones; column 30, lines 20-39).

Regarding claim 27: the combination Jones- Tully discloses the method of claim 19,

wherein querying the sessions table yields data associated with usage trends (see

Jones; column 30, lines 20-39).

Regarding claim 28: the combination Jones- Tully discloses the method of claim 27,

further comprising: allocating database resources based on the data associated with

usage trends (see Jones; column 30, lines 20-39).

Regarding claim 29: the combination Jones- Tully discloses the method of claim 19,

wherein matching entries in the temporary session data table is performed using a user

identifier and a session identifier [see Tully; par. 0126; 0132; fig. 7; 0130].

Regarding claim 30: the combination Jones- Tully discloses the method of claim

19, wherein matching entries in the temporary session data table is performed using a

user identifier and an account string [see Tully; par. 0126; 0132; fig. 7; 0130].

Conclusion

6.   Accordingly, **THIS ACTION IS MADE NON-FINAL**. Any inquiry concerning this

communication or earlier communications from examiner should be directed to Jude

Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be

reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (571) 272-

9000.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

JJG

June 12, 2007